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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,470	10/04/2000	Richard W. DeLange	Grant Prideco-109	5425

7590

09/30/2002

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EXAMINER

LUGO, CARLOS

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 09/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/679,470

Applicant(s)

DELANGE ET AL.

Examiner

Carlos Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-17 is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 September 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to applicant's amendment filed on September 3, 2002. The Office Action filed on May 3, 2002 was send as a Final Rejection. After reviewing applicant's remarks on Page 6 of the amendment, the examiner withdraws that final rejection. Now, this Office Action is a FINAL ACTION.

Specification

2. The specification is objected to because of the following informalities:

Claim 3 Line 2, change "then" as --than--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-8,10 and 12 are rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 1,590,357 to Feisthamel.

Regarding claims 1 and 6, Feisthamel discloses a connection comprises a pin (2a) having pin threads, formed externally and extending along a frustoconical surface from a starting point and terminating adjacent the pin end. That external surface has an outside diameter no greater than the outside diameter of a major length of the pin member. The pin includes a pin nose at the free end (at the end of 2a) having an inclined nose section.

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A box member (1a) includes a threaded surface to be engaged with the pin-threaded surface. This box-threaded surface extends along a frustoconical surface from a starting point and terminating adjacent the box end or in the opposite direction of the pin threaded surface. The box includes an annular inclined shoulder formed internally the box for engagement with the inclined nose section.

An external seal is located between the pin and the box element. It is located adjacent the starting point of the pin threaded surface and the box end. The external seal comprises an annular elastomeric seal (13) disposed between the pin and the box.

An internal seal (7a) is located adjacent the starting point of the box threaded surface and the pin end. The pin and box threads are confined between the external and internal seals.

As to claim 2, Feisthamel discloses that the pin threads run out to an outside diameter of the first tubular body at the starting point of the pin threads.

As to claim 3, Feisthamel discloses that the stab flanks of the pin threads have a greater inclination relative to a central axis of the connector than load flanks of the pin threads.

As to claim 4, Feisthamel discloses that the pin seal surface is formed on a radially enlarged section of the first tubular body.

As to claim 5, Feisthamel discloses that the pin threads and the box threads are fully confined between the external and internal seals when the pin and the box members are engaged.

As to claim 7, Feisthamel discloses that the pin threads and the box threads are fully confined between the external and internal seals when the pin and the box members are engaged.

As to claim 8, Feisthamel discloses that the annular elastomeric seal ring (element 13) is carried in an annular groove (element 12) formed on the first tube.

As to claim 10, Feisthamel teaches an annular elastomeric seal ring (13) that is carried in an annular groove (12) formed on a first tube and adapted to engage a face formed on at an axial end of a box.

As to claim 12, Feisthamel discloses that the box carries a substantially frustoconical seal surface adjacent a face at an axial end of the second tube and the pin carries an annular elastomeric seal ring (element 13) adjacent the starting point for the pin threads, whereby the frustoconical surface engages the seal ring to provide the external seal when the pin and the box are engaged.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 9 is rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 1,590,357 to Feisthamel.

Feisthamel fails to disclose that the annular elastomeric seal ring is carried in an annular groove formed on the second tube. Feisthamel discloses that the annular elastomeric seal ring (13) is carried in an annular groove (12) formed on the first tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an annular groove in the second pipe because it would perform the object of placing the annular seal ring in order to prevent the loosening of the connection.

Allowable Subject Matter

7. **Claims 13-17 are allowed.**
8. **Claim 11 is objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed on September 3, 2002 have been fully considered but they are not persuasive. Feisthamel discloses the invention as claimed.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo. The examiner phone number is (703)-305-9747. The fax number for correspondence before a final action is (703)-872-9326 and the fax number for correspondence after final action is (703)-872-9327. The email direction of the examiner is carlos.lugo@uspto.gov. The examiner can normally be reached on Monday to Friday from 9:30am to 6:30pm (EST). If the examiner is not available, please leave a message, including the application number and the examiner will answer the message as soon as possible.

September 25, 2002

